## ABSTRACT OF THE DISCLOSURE

Methods and apparatuses for validating a message with a signature. The method may include receiving the message with the signature and carrying out an integrated validation and storing process. The signature may be validated based on a validation algorithm and a key. The received message may be stored in a database. A method for generating a signature for a message may include carrying out an integrated receiving and generating process. The message to be sent may be received and the signature may be generated based on a signing algorithm and a key. The message may be sent with the signature.

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